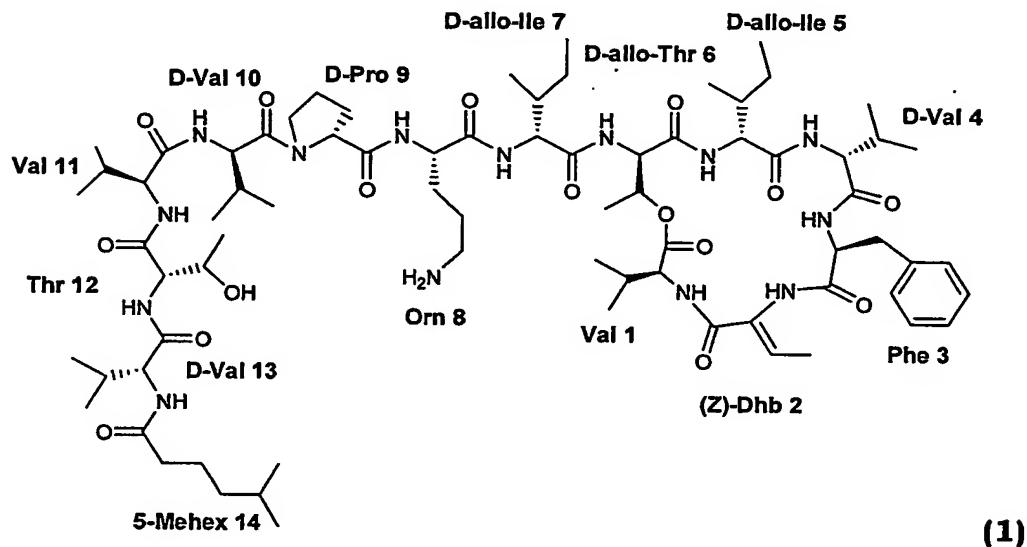


## Claims

1. A compound based on the structures of kahalalide F and which differs in at least one respect.

2. A compound according to claim 1 of formula 1:



wherein one or more amino acids have been substituted by other natural or non natural amino acids, have been masked with organic groups or have been removed.

3. A compound according to claim 1 or claim 2, wherein the methylhexanoyl group has been substituted by another carboxoyl group or has been removed.

4. A compound according to claim 1, wherein an amino acid in the cyclic part is different from that in kahalalide F

5. A compound according to claim 4, wherein the L-Phe at position 3 is changed.
6. A compound according to claim 5, wherein the amino acid at position 3 is a masked L-Phe.
7. A compound according to claim 5, wherein the amino acid at position 3 is a different natural amino acid or is a non-natural amino acid.
8. A compound according to any preceding claim wherein the L-Orn at position 8 is changed.
9. A compound according to claim 8, wherein the amino acid at position 8 is a masked L-Orn.
10. A compound according to claim 5, wherein the amino acid at position 8 is a different natural amino acid or is a non-natural amino acid.
11. A compound according to any preceding claim, wherein the sidechain is changed.

12. A compound according to claim 11, wherein the terminal acyl is changed.

13. A compound according to claim 12, wherein the terminal acyl is 4(S)-methylhexyl.

14. A compound based on the structure of kahalalide F of formula 1 designated KF, and selected from: [D-Thr<sup>6</sup>]-KF, [D-Ser<sup>6</sup>]-KF, [Glu<sup>8</sup>]-KF, [Lys<sup>8</sup>]-KF, [Val<sup>12</sup>]-KF, [D-Thr<sup>12</sup>]-KF, [D-Cha<sup>13</sup>]-KF, [hCh<sup>11</sup>]-KF, [hCh<sup>11</sup>, D-Cha<sup>13</sup>]-KF, [D-Cha<sup>4</sup>, D-Cha<sup>5</sup>, D-Cha<sup>7</sup>]-KF, [D-Val<sup>5</sup>, D-Val<sup>7</sup>]-KF, [Icos<sup>14</sup>]-KF, [(c/t)-4-Me-cHexa<sup>14</sup>]-KF, [Und<sup>14</sup>]-KF, [(4R)-MeHex<sup>14</sup>]-KF, [(4RS)-MeHex<sup>14</sup>]-KF, [Oct<sup>14</sup>]-KF, [p-MeBza<sup>14</sup>]-KF, [Bza<sup>14</sup>]-KF, [p-CF<sub>3</sub>Bza<sup>14</sup>]-KF, [3,5-dFPhAc<sup>14</sup>]-KF, [Pipe<sup>14</sup>]-KF, [p-CF<sub>3</sub>Cinn<sup>14</sup>]-KF, [p-CF<sub>3</sub>PhAc<sup>14</sup>]-KF, [Pfh<sup>14</sup>]-KF, [6-OHep<sup>14</sup>]-KF, [6,6-dFHep<sup>14</sup>]-KF, [4-GuBut<sup>14</sup>]-KF, [Lys<sup>8</sup>, (4S)-MeHex<sup>14</sup>]-KF, [noVal<sup>11</sup>, noThr<sup>12</sup>, noD-Val<sup>13</sup>]-KF, [noVal<sup>11</sup>, noThr<sup>12</sup>, noD-Val<sup>13</sup>, Mst<sup>14</sup>]-KF, [Gly<sup>13</sup>]-KF, [D-Ala<sup>13</sup>]-KF, [D-Leu<sup>13</sup>]-KF, [D-Phe<sup>13</sup>]-KF, [D-Pro<sup>13</sup>]-KF, [Val<sup>13</sup>]-KF, [D-Glu<sup>13</sup>]-KF, [D-Gln<sup>13</sup>]-KF, [D-Thr<sup>13</sup>]-KF, [Gly<sup>11</sup>]-KF, [Phe<sup>11</sup>]-KF, [Ala<sup>11</sup>]-KF, [Leu<sup>11</sup>]-KF, [D-Val<sup>11</sup>]-KF, [Pro<sup>11</sup>]-KF, [Gln<sup>11</sup>]-KF, [Orn<sup>11</sup>]-KF, [Thr<sup>11</sup>]-KF, [Glu<sup>11</sup>]-KF, [Ala<sup>12</sup>, noD-Val<sup>13</sup>]-KF, [Gly<sup>12</sup>, noD-Val<sup>13</sup>]-KF, [Leu<sup>12</sup>, noD-Val<sup>13</sup>]-KF, [Pro<sup>12</sup>, noD-Val<sup>13</sup>]-KF, [Glu<sup>12</sup>, noD-Val<sup>13</sup>]-KF, [Orn<sup>12</sup>, noD-Val<sup>13</sup>]-KF, [Gln<sup>12</sup>, noD-Val<sup>13</sup>]-KF, [Pro<sup>9</sup>, (4S)-MeHex<sup>14</sup>]-KF, [D-Pip<sup>9</sup>, (4S)-MeHex<sup>14</sup>]-KF, [D-Tic<sup>9</sup>, (4S)-MeHex<sup>14</sup>]-KF, [(5R)-Ph-Pro<sup>9</sup>, (4S)-MeHex<sup>14</sup>]-KF, [hCh<sup>3</sup>]-KF, [D,L-Ser<sup>2</sup>]-KF, [Gly<sup>2</sup>]-KF, [Aib<sup>2</sup>]-KF, [Dha<sup>2</sup>]-KF, [Trp<sup>3</sup>]-KF, [D-Val<sup>1</sup>, D-Phe<sup>3</sup>, Val<sup>4</sup>, allo-Ile<sup>5</sup>, allo-Thr<sup>6</sup>, allo-Ile<sup>7</sup>, D-Orn<sup>8</sup>, Pro<sup>9</sup>, Val<sup>10</sup>, D-Val<sup>11</sup>, D-Thr<sup>12</sup>, Val<sup>13</sup>]-KF, [Phe(3,4-Cl<sub>2</sub>)<sup>3</sup>, (4S)-MeHex<sup>14</sup>]-KF, [Phe(F<sub>5</sub>)<sup>3</sup>, (4S)-MeHex<sup>14</sup>]-KF, [Phe(4-I)<sup>3</sup>, (4S)-MeHex<sup>14</sup>]-KF, [Phe(4-NO<sub>2</sub>)<sup>3</sup>, (4S)-MeHex<sup>14</sup>]-KF, [Phe(4-F)<sup>3</sup>, (4S)-MeHex<sup>14</sup>]-KF,

[Tyr(Me)<sup>3</sup>, (4S)-MeHex<sup>14</sup>]-KF, [Thi<sup>3</sup>, (4S)-MeHex<sup>14</sup>]-KF, [Tic<sup>3</sup>, (4S)-MeHex<sup>14</sup>]-KF, [Tyr<sup>3</sup>, (4S)-MeHex<sup>14</sup>]-KF, [Oic<sup>3</sup>, (4S)-MeHex<sup>14</sup>]-KF, [NMePhe<sup>3</sup>, (4S)-MeHex<sup>14</sup>]-KF, [Phe(2-Cl)<sup>3</sup>]-KF, [Phe(3-Cl)<sup>3</sup>]-KF, [Phe(4-Cl)<sup>3</sup>]-KF, [Phe(3,4-F<sub>2</sub>)<sup>3</sup>]-KF, [NaI<sup>3</sup>]-KF, [Bip<sup>3</sup>]-KF, [Phg<sup>3</sup>]-KF, [Phe(3,4-Cl<sub>2</sub>)<sup>3</sup>, p-CF<sub>3</sub>Cinn<sup>14</sup>]-KF, [N(Me)<sub>2</sub>,N'(Me)<sub>2</sub>-Arg<sup>8</sup>]-KF, [N(Me,Ph),N'(Me)<sub>2</sub>-Arg<sup>8</sup>]-KF, [N(CH<sub>2</sub>)<sub>4</sub>,N'(Me)<sub>2</sub>-Arg<sup>8</sup>]-KF, [N(CH<sub>2</sub>)<sub>4</sub>,N'(CH<sub>2</sub>)<sub>4</sub>-Arg<sup>8</sup>]-KF, [Nδ(CHN(CH<sub>2</sub>)<sub>4</sub>-N'(CH<sub>2</sub>)<sub>4</sub>)-Orn<sub>8</sub>]-KF, [Nε(Me)<sub>3</sub>-Lys<sup>8</sup>, (4S)-MeHex<sup>14</sup>]-KF, [Thr(OTFA)<sup>12</sup>, (4S)-MeHex<sup>14</sup>]-KF, [Orn(NδTFA)<sup>8</sup>, Thr(OTFA)<sup>12</sup>, (4S)-MeHex<sup>14</sup>]-KF, [Orn(NδTFA)<sup>8</sup>, (4S)-MeHex<sup>14</sup>]-KF, [Thr(OTFA)<sup>12</sup>, Lit(OTFA)<sup>14</sup>]-KF, [no 5-MeHex<sup>14</sup>, N(Hep)<sub>2</sub>-Val<sup>13</sup>]-KF, [Orn(Biot)<sup>8</sup>]-KF, [L-Val-ds<sup>11</sup>]-KF, [AM<sup>14</sup>]-KF, [AO<sup>14</sup>]-KF, [C(=N(CH<sub>3</sub>)<sub>2</sub>)<sup>14</sup>]-KF, [D-Ile<sup>7</sup>]-KF, [D-Val<sup>7</sup>]-KF, [D-Orn<sup>8</sup>, L-Pro<sup>9</sup>]-KF, [D-Cys<sup>7</sup>, L-Cys<sup>11</sup>]-KF, [D-Cys<sup>7</sup>, D-Cys<sup>10</sup>]-KF, [D-homoCys<sup>7</sup>, D-homoCys<sup>10</sup>]-KF, [Gly<sup>12</sup>]-KF, [Ala<sup>12</sup>]-KF, [Leu<sup>12</sup>]-KF, [Phe<sup>12</sup>]-KF, [Glu<sup>12</sup>]-KF, [Orn<sup>12</sup>]-KF, [Pro<sup>12</sup>]-KF, [D-Orn<sup>13</sup>]-KF, [Gln<sup>12</sup>]-KF and [D-Val<sup>11</sup>]-KF,

wherein the amino acid or group indicated between brackets is the modification introduced in the structure of kahalalide F.